Title (en)

PREPARATION OF ALKALI METAL SILICATES

Publication

EP 0141516 B1 19880713 (EN)

Application

EP 84306351 A 19840917

Priority

GB 8325478 A 19830923

Abstract (en)

[origin: US4556466A] The ratio of silica to alkali in silicate liquors is increased, for example to convert alkaline grades to neutral grades, by passing the liquor through an electrodialysis stack comprising spaced ion-exchange membranes mounted between an anode and a cathode, the membranes forming cell triplets of a concentrating cell between an ion-exchange membrane and a fine cation exchange membrane, a diluting cell between the first cation exchange membrane and a second cation exchange membrane and a proton donor cell between the second cation exchange membrane and an adjacent anion-exchange membrane, the method comprising passing the silicate liquors through the diluting cells in the stack, passing water or an aqueous solution through the concentrating cells and passing an acidic solution through the proton donor cells whereby the silicate liquor is caused to lose alkali metal ions to the concentrating liquor and to receive hydrogen ions from the proton donor liquor.

IPC 1-7

C01B 33/32; B01D 13/02

IPC 8 full level

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CPC (source: EP US)

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